

APPLICATION FOR FINANCIAL ASSISTANCE
Revised 4/99

IMPORTANT: Please consult the "Instructions for Completing the Project Application" for assistance in completion of this form.

SUBDIVISION: CITY OF CINCINNATI **CODE#** 061-15000

DISTRICT NUMBER: 2 **COUNTY:** Hamilton **DATE** 9 / 10 / 2007

CONTACT: John Brazina **PHONE #** (513) 352-6249

(THE PROJECT CONTACT PERSON SHOULD BE THE INDIVIDUAL WHO WILL BE AVAILABLE ON A DAY-TO-DAY BASIS DURING THE APPLICATION REVIEW AND SELECTION PROCESS AND WHO CAN BEST ANSWER OR COORDINATE THE RESPONSE TO QUESTIONS)

FAX (513) 352-1581 **E-MAIL** john.brazina@cincinnati-oh.gov

PROJECT NAME: HAM-US 27-6.29 (Colerain/West Fork/Virginia Inter. Improv.)

SUBDIVISION TYPE

(Check Only 1)

- ☐ 1. County
☒ 2. City
☐ 3. Township
☐ 4. Village
☐ 5. Water/Sanitary District
(Section 6119 O.R.C.)

FUNDING TYPE REQUESTED

(Check All Requested & Enter Amount)

- ☒ 1. Grant \$ 700,000
☐ 2. Loan \$ _____
☐ 3. Loan Assistance \$ _____

PROJECT TYPE

(Check Largest Component)

- ☒ 1. Road
☐ 2. Bridge/Culvert
☐ 3. Water Supply
☐ 4. Wastewater
☐ 5. Solid Waste
☐ 6. Stormwater

TOTAL PROJECT COST: \$ 3,500,000

FUNDING REQUESTED: \$ 700,000

DISTRICT RECOMMENDATION

To be completed by the District Committee ONLY

GRANT: \$ 700,000

LOAN ASSISTANCE: \$ _____

SCIP LOAN: \$ _____ **RATE:** _____ % **TERM:** _____ yrs.

RPL LOAN: \$ _____ **RATE:** _____ % **TERM:** _____ yrs.

(Check Only 1)

☐ State Capital Improvement Program

☐ Small Government Program

☒ Local Transportation Improvements Program

2007 SEP 21 PM 1:19
HAMILTON COUNTY
ENGINEERS
PERMIT DEPARTMENT

FOR OPWC USE ONLY

PROJECT NUMBER: C _____ /C _____

Local Participation _____ %

OPWC Participation _____ %

Project Release Date: ____ / ____ / ____

OPWC Approval: _____

APPROVED FUNDING: \$ _____

Loan Interest Rate: _____ %

Loan Term: _____ years

Maturity Date: _____

Date Approved: ____ / ____ / ____

SCIP Loan _____ **RPL Loan** _____

1.0 PROJECT FINANCIAL INFORMATION

1.1 PROJECT ESTIMATED COSTS:
(Round to Nearest Dollar)

TOTAL DOLLARS

**FORCE ACCOUNT
DOLLARS**

a.) Basic Engineering Services:

\$.00

Preliminary Design \$.00

Final Design \$.00

Bidding \$.00

Construction Phase \$.00

Additional Engineering Services

\$.00

*Identify services and costs below.

b.) Acquisition Expenses:

Land and/or Right-of-Way

\$.00

c.) Construction Costs:

\$ 3,200,000.00

d.) Equipment Purchased Directly:

\$.00

e.) Permits, Advertising, Legal:

(Or Interest Costs for Loan Assistance
Applications Only)

\$.00

f.) Construction Contingencies:

\$ 300,000.00

g.) TOTAL ESTIMATED COSTS:

\$ 3,500,000.00

*List Additional Engineering Services here:

Service:

Cost:

1.2 PROJECT FINANCIAL RESOURCES:
(Round to Nearest Dollar and Percent)

	DOLLARS	%
a.) Local In-Kind Contributions	\$ <u> .00</u>	
b.) Local Revenues	\$ <u> .00</u>	
c.) Other Public Revenues	\$ <u> .00</u>	
ODOT PID #77484	\$ <u>2,800,000.00</u>	<u>80</u>
Rural Development	\$ <u> .00</u>	
OEPA	\$ <u> .00</u>	
OWDA	\$ <u> .00</u>	
CDBG	\$ <u> .00</u>	
OTHER _____	\$ <u> .00</u>	
SUBTOTAL LOCAL RESOURCES:	\$ <u>2,800,000.00</u>	<u>80</u>
d.) OPWC Funds		
1. Grant	\$ <u>700,000.00</u>	<u>20</u>
2. Loan	\$ <u> .00</u>	
3. Loan Assistance	\$ <u> .00</u>	
SUBTOTAL OPWC RESOURCES:	\$ <u>700,000.00</u>	<u>20</u>
e.) TOTAL FINANCIAL RESOURCES:	\$ <u>3,500,000.00</u>	<u>100%</u>

1.3 AVAILABILITY OF LOCAL FUNDS:

Attach a statement signed by the Chief Financial Officer listed in section 5.2 certifying all local share funds required for the project will be available on or before the earliest date listed in the Project Schedule section.

ODOT PID# 77474

Sale Date: January 1, 2009

STATUS: (Check one)

☒ Traditional

Local Planning Agency (LPA)

State Infrastructure Bank

2.0 PROJECT INFORMATION

If project is multi-jurisdictional, information must be consolidated in this section.

2.1 PROJECT NAME: HAM-US 27-6.29 (Colerain/West Fork/Virginia Improv.)

2.2 BRIEF PROJECT DESCRIPTION - (Sections A through C):

A: SPECIFIC LOCATION:

Intersection of Colerain Avenue and West Fork Road/Virginia Avenue. In the community of Northside. (See attached map)

PROJECT ZIP CODE: 45223

B: PROJECT COMPONENTS:

Improve intersection by widening south approach of intersection. Align through movement for east and west bound traffic on West Fork and Virginia. Add an additional left turn lane from Virginia to Colerain. Construct a new concrete base with asphalt surface, curbs, sidewalk, traffic signal, lighting, improve storm drainage facilities.

C: PHYSICAL DIMENSIONS / CHARACTERISTICS:

Colerain is 6 lanes, 66 feet in width and 600 feet in length.
Virginia is 5 lanes, 64 feet in width and 400 feet in length.

D: DESIGN SERVICE CAPACITY:

Detail current service capacity vs. proposed service level.

Road or Bridge: Current ADT 30,747 Year: 2004 Projected ADT: 48,922 Year: 2030

Water/Wastewater: Based on monthly usage of 7,756 gallons per household, attach current rate ordinance. Current Residential Rate: \$_____ Proposed Rate: \$_____

Stormwater: Number of households served: _____

2.3 USEFUL LIFE / COST ESTIMATE: Project Useful Life: 20 Years.

Attach Registered Professional Engineer's statement, with original seal and signature confirming the project's useful life indicated above and estimated cost.

3.0 REPAIR/REPLACEMENT or NEW/EXPANSION:

TOTAL PORTION OF PROJECT REPAIR/REPLACEMENT \$ 1,750,000.00

TOTAL PORTION OF PROJECT NEW/EXPANSION \$ 1,750,000.00

4.0 PROJECT SCHEDULE: *

	BEGIN DATE	END DATE
4.1 Engineering/Design:	<u>1 / 1 / 05</u>	<u>9 / 19 / 08</u>
4.2 Bid Advertisement and Award:	<u>1 / 1 / 09</u>	<u>3 / 1 / 09</u>
4.3 Construction:	<u>3 / 1 / 09</u>	<u>9 / 1 / 10</u>
4.4 Right-of-Way/Land Acquisition:	<u>10 / 13 / 06</u>	<u>9 / 17 / 08</u>

* Failure to meet project schedule may result in termination of agreement for approved projects. Modification of dates must be requested in writing by the CEO of record and approved by the commission once the Project Agreement has been executed. The project schedule should be planned around receiving a Project Agreement on or about July 1st.

5.0 APPLICANT INFORMATION:

- 5.1 CHIEF EXECUTIVE OFFICER Scott Stiles
TITLE Assistant City Manager
STREET Room 104, City Hall
 801 Plum Street
CITY/ZIP Cincinnati, Ohio 45202
PHONE (513) 352-3475
FAX (513) 352-2458
E-MAIL scott.stiles@cincinnati-oh.gov
- 5.2 CHIEF FINANCIAL OFFICER Joe Gray
TITLE Acting Director of Finance
STREET Room 250, City Hall
 801 Plum Street
CITY/ZIP Cincinnati, Ohio 45202
PHONE (513) 352-5372
FAX (513) 352-2370
E-MAIL joe.gray@cincinnati-oh.gov
- 5.3 PROJECT MANAGER Don Gindling, PE
TITLE Principal Public Works Construction Engineer
STREET Room 450, City Hall
 801 Plum Street
CITY/ZIP Cincinnati, Ohio 45202
PHONE (513) 352-1518
FAX (513) 352-1581
E-MAIL don.gindling@cincinnati-oh.gov

Changes in Project Officials must be submitted in writing from the CEO.

6.0 ATTACHMENTS/COMPLETENESS REVIEW:

Confirm in the blocks [] below that each item listed is attached.

- [] A certified copy of the legislation by the governing body of the applicant authorizing a designated official to sign and submit this application and execute contracts. This individual should sign under 7.0, Applicant Certification, below.
- [X] A certification signed by the applicant's chief financial officer stating all local share funds required for the project will be available on or before the dates listed in the Project Schedule section. If the application involves a request for loan (RLP or SCIP), a certification signed by the CFO which identifies a specific revenue source for repaying the loan also must be attached. Both certifications can be accomplished in the same letter.
- [X] A registered professional engineer's detailed cost estimate and useful life statement, as required in 164-1-13, 164-1-14, and 164-1-16 of the Ohio Administrative Code. Estimates shall contain an engineer's original seal or stamp and signature.
- [] A cooperation agreement (if the project involves more than one subdivision or district) which identifies the fiscal and administrative responsibilities of each participant.
- [] Projects which include new and expansion components and potentially affect productive farmland should include a statement evaluating the potential impact. If there is a potential impact, the Governor's Executive Order 98-VII and the OPWC Farmland Preservation Review Advisory apply.
- [] Capital Improvements Report: (Required by O.R.C. Chapter 164.06 on standard form)
- [X] Supporting Documentation: Materials such as additional project description, photographs, economic impact (temporary and/or full time jobs likely to be created as a result of the project), accident reports, impact on school zones, and other information to assist your district committee in ranking your project. Be sure to include supplements, which may be required by your local District Public Works Integrating Committee.

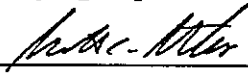
7.0 APPLICANT CERTIFICATION:

The undersigned certifies that: (1) he/she is legally authorized to request and accept financial assistance from the Ohio Public Works Commission; (2) to the best of his/her knowledge and belief, all representations that are part of this application are true and correct; (3) all official documents and commitments of the applicant that are part of this application have been duly authorized by the governing body of the applicant; and, (4) should the requested financial assistance be provided, that in the execution of this project, the applicant will comply with all assurances required by Ohio Law, including those involving Buy Ohio and prevailing wages.

Applicant certifies that physical construction on the project as defined in the application has NOT begun, and will not begin until a Project Agreement on this project has been executed with the Ohio Public Works Commission. Action to the contrary will result in termination of the agreement and withdrawal of Ohio Public Works Commission funding of the project.

Scott Stiles, Assistant City Manager

Certifying Representative (Type or Print Name and Title)

 9/14/07

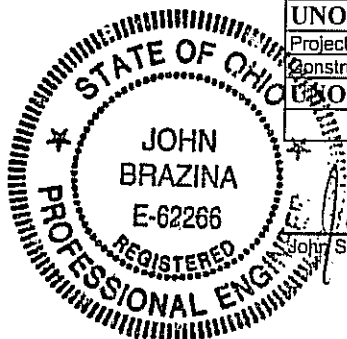
Signature/Date Signed

HAM-US 27-6.29 (Colerain/West Fork/Virginia Inter Imp.)

2007

REF.	ITEM NO.	TOTAL	UNIT	DESCRIPTION	EST. UNIT PRICE	ESTIMATED COST
ROADWAY ITEMS						
1	103.05	Lump	Sum	Contract Bond	Lump Sum	\$20,000
2	Special	6	ea.	Project Signs	\$ 404.80	\$2,429
3	201	Lump	Sum	Clearing and Grubbing	\$ 5,750.00	\$5,000
4	202	2	ea.	Building Removed	\$ 20,010.00	\$40,020
5	202	12000	s.y.	Concrete Pavement Removed	\$ 13.80	\$165,600
6	202	250	l.f.	Fence Removed	\$ 3.45	\$863
7	202	450	l.f.	Pipe Removed, 24" and under	\$ 11.50	\$5,175
8	202	500	l.f.	Granite Curb Removed	\$ 11.50	\$5,750
9	202	500	l.f.	Granite Curb Cleaned and Stockpiled	\$ 57.50	\$28,750
10	202	6	ea.	Inlet Abandoned	\$ 345.00	\$2,070
11	203	750	c.y.	Embankment	\$ 11.50	\$8,625
12	203	2500	c.y.	Excavation not including embankment construction	\$ 28.75	\$71,875
13	203	12000	s.y.	Subgrade Compaction	\$ 2.30	\$27,600
14	203	70	hrs	Proof Rolling	\$ 69.00	\$4,830
15	205	35	tons	Special Fill Material	\$ 17.25	\$604
16	304	2000	c.y.	Aggregate Base	\$ 28.75	\$57,500
17	448	600	c.y.	Asphalt Concrete Intermediate Course, Type 1	\$ 92.00	\$55,200
18	448	600	c.y.	Asphalt Concrete Surface Course, Type 1H	\$ 92.00	\$55,200
19	452	360	s.y.	11" Plain Concrete Pavement	\$ 46.00	\$16,560
20	452	12000	s.y.	9" Plain Concrete Pavement	\$ 46.00	\$552,000
21	602	10	c.y.	Brick Masonry	\$ 287.50	\$2,875
22	603	60	l.f.	3" Conduit, Type "G"	\$ 17.25	\$1,035
23	603	160	l.f.	12" Conduit, Type B	\$ 57.50	\$9,200
24	603	200	l.f.	24" Conduit, Type "B"	\$ 115.00	\$23,000
25	603	800	l.f.	36" Conduit, Type "B"	\$ 230.00	\$184,000
26	Special	200	l.f.	Connection Pipe Cleaned	\$ 11.50	\$2,300
27	604	4	ea.	Manhole Adjusted to Grade With Adjusting Rings	\$ 57.50	\$230
28	604	51	ea.	Manhole Adjusted to Grade Without Adjusting Rings	\$ 402.50	\$20,528
29	604	4	ea.	Valve Chambers Adjust With Adjusting Rings	\$ 230.00	\$920
30	604	30	ea.	Valve Chambers Adjust Without Adjusting Rings	\$ 402.50	\$12,075
31	604	2	ea.	SGI Adjusted to Grade With Inlet Riser	\$ 172.50	\$345
32	604	2	ea.	DGI/CI Adjusted to Grade With Inlet Riser	\$ 201.25	\$403
33	604	5	ea.	SGI Adjusted to Grade	\$ 345.00	\$1,725
34	604	18	ea.	DGI/CI Adjusted to Grade	\$ 402.50	\$7,245
35	604	10	ea.	DGI/CI Repaired and Adjusted to Grade	\$ 460.00	\$4,600
36	604	15	ea.	Inlets Repaired (Ditch or Curb)	\$ 345.00	\$5,175
37	604	15	ea.	Inlet Grates	\$ 115.00	\$1,725
38	604	10	ea.	Double Gutter Inlet (DGI)	\$ 3,450.00	\$34,500
39	605	3000	l.f.	4" Shallow Pipe Underdrain	\$ 9.20	\$27,600
40	606	4	ea.	Anchor Assembly, Type T	\$ 862.50	\$3,450
41	606	450	l.f.	Guardrail, Type 5	\$ 28.75	\$12,938
42	607	300	l.f.	Fence, Type CL	\$ 34.50	\$10,350
43	608	20	ea.	Curb Ramp, Type 1	\$ 575.00	\$11,500
44	608	25000	s.f.	Concrete Walk, 5 inches	\$ 5.75	\$143,750
45	609	4800	l.f.	Concrete Curb Integral with Concrete Pavement, Type B-1	\$ 23.00	\$110,400
46	609	200	s.y.	Concrete/Paver Traffic Island	\$ 100.05	\$20,010
47	614	100	hrs	Law Enforcement Officer with Patrol Car	\$ 57.50	\$5,750
48	614	Lump	Sum	Maintaining Traffic	\$ -	\$200,000
49	616	10	mgal	Water (Dust Control)	\$ 5.75	\$58
50	619	Lump	Sum	Field Office, Type A	\$ -	\$5,750
51	627	7500	s.f.	Concrete Driveway	\$ 5.75	\$43,125
52	628	1500	l.f.	Sawing Concrete	\$ 2.88	\$4,313
53	659	3000	s.y.	Seeding and Mulching with Topsoil	\$ 4.60	\$13,800
54	712.09	10200	s.y.	Geotextile Fabric, Type D	\$ 3.45	\$35,190
55	1125	10	ea.	Reset Existing Valve Box Complete	\$ 172.50	\$1,725
56	Special	1	ea.	Water Works adjustments	\$ 60,375.00	\$60,375
57	Special	2	ea.	Furnishing Valve Box Casting	\$ 57.50	\$115
58	1132	2	ea.	Resetting Existing Curb and Roadway Boxes	\$ 201.25	\$403
59	Special	3	ea.	Traffic signals	\$ 100,000.00	\$300,000
60	Special	1	ea.	Traffic signs and striping	\$ 250,000.00	\$250,000
61	Special	1	ea.	Concrete/Allen block Retaining walls	\$ 315,000.00	\$315,000

UNOFFICIAL TOTAL ROADWAY ITEMS		\$3,013,130
Project Contingency (10%)	\$ 301,313.01	\$301,313
Construction Management (6%)	\$ 180,787.80	\$180,788
UNOFFICIAL CONSTRUCTION COSTS		\$3,495,231
USE		\$3,500,000

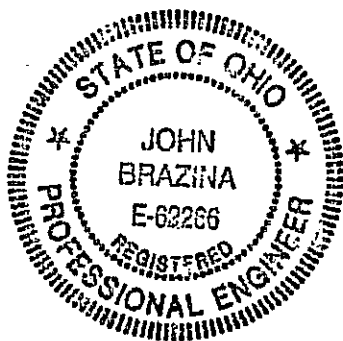


John S. Brazina, P.E.

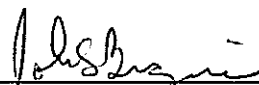
September 10, 2007

Subject: HAM-US27-6.29 (Colerain/West Fork/Virginia Improvements)
Certification of Useful Life for OPWC Projects

As required by Chapter 164-1-13 of the Ohio Administrative Code, I hereby certify that the design useful life of the subject street reconstruction is at least twenty (20) years.

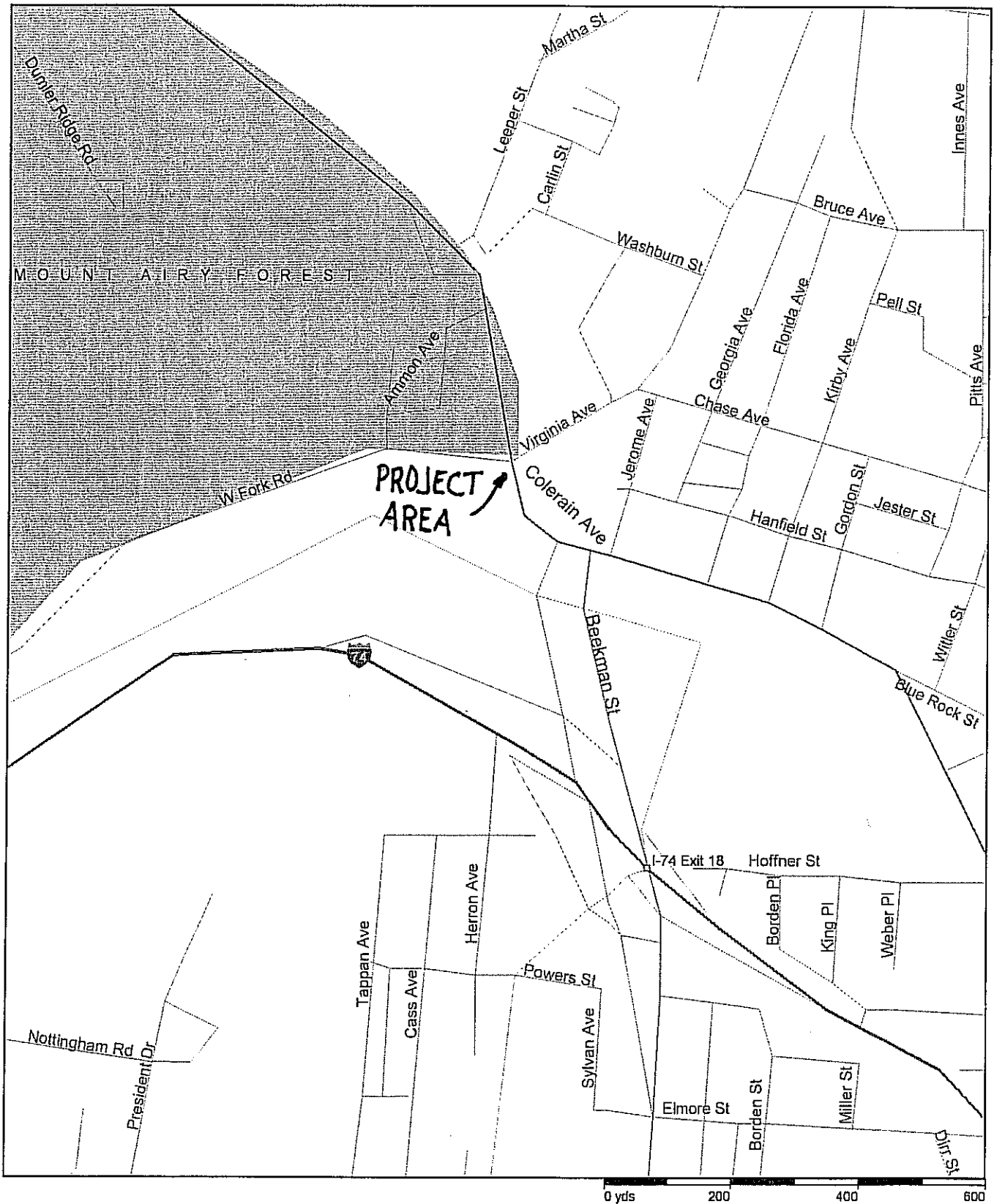


(seal)



John Seth Brazina, P.E.
Senior Engineer
City of Cincinnati

HAM-US 27-6.29
Colerain West Fork Virginia Intersection Improvement



CERTIFICATION OF TRAFFIC COUNT

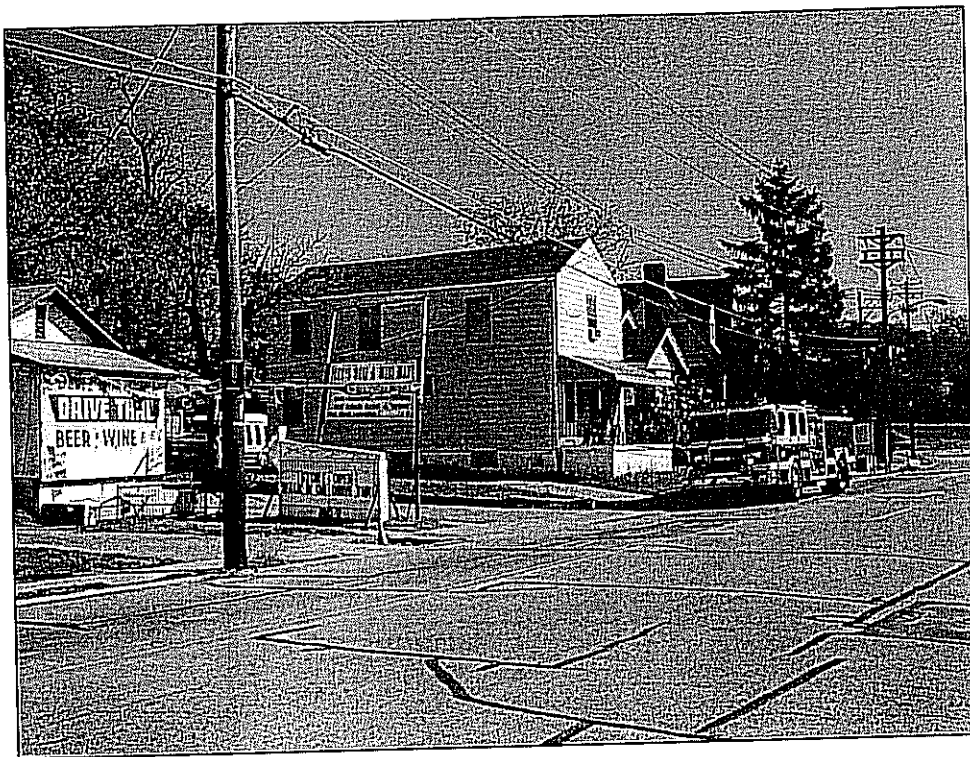
As required by the District 2 Integrating Committee, I hereby certify that the traffic counts herein attached to the **Colerain/Westfork/Virginia Improvements** project application are a true and accurate count done by the City of Cincinnati's Traffic Engineering Division.

Stephen I. Niemeier

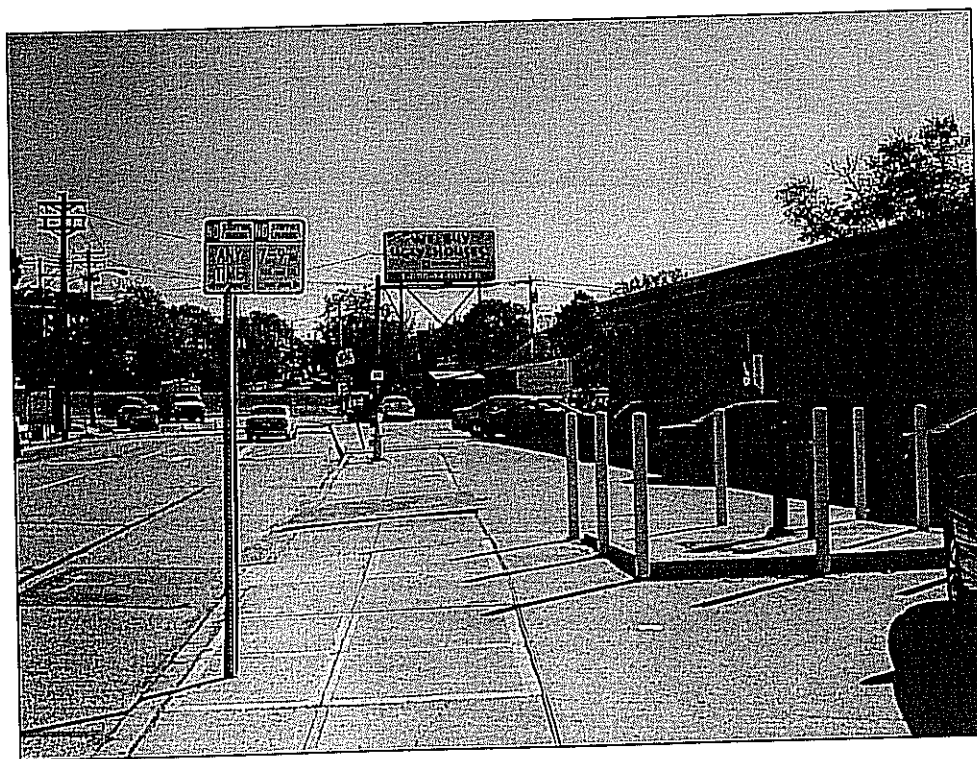
Stephen I. Niemeier, P.E.
Principal Traffic Engineer



Photographs

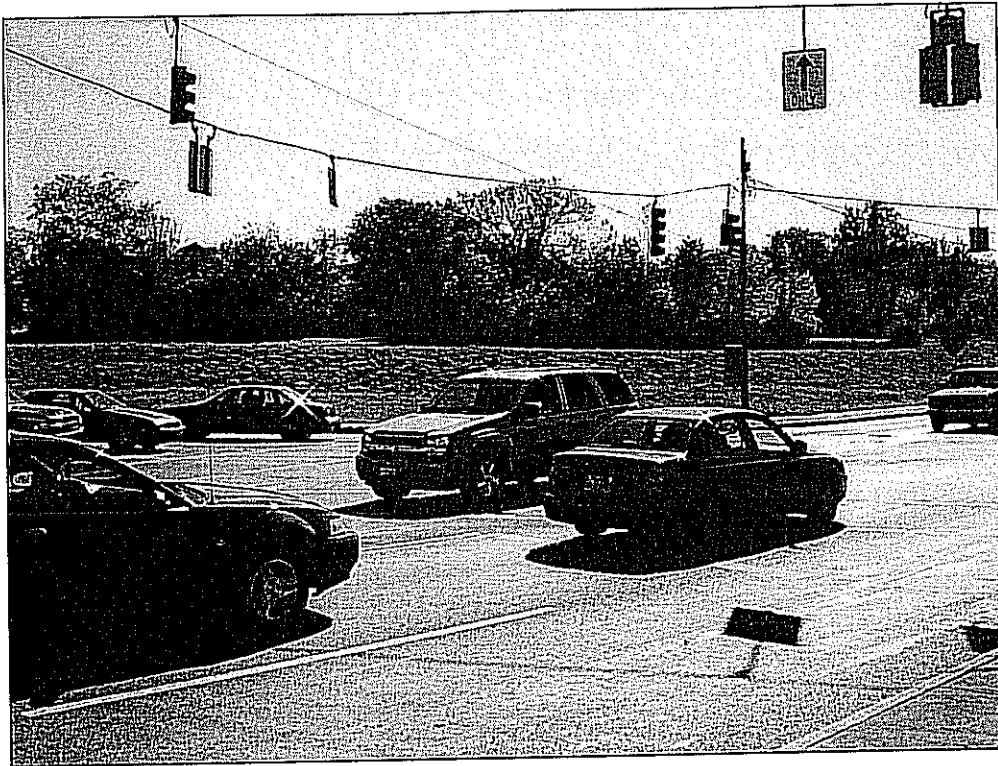


Photograph 1

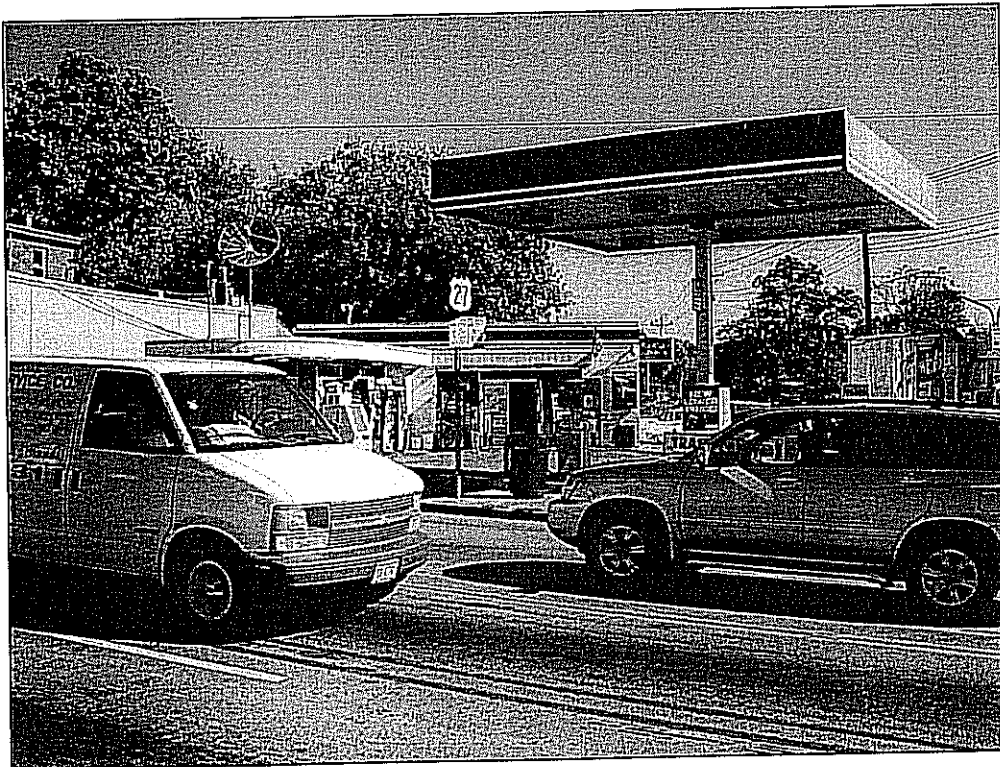


Photograph 2

NO Defined Sidewalk

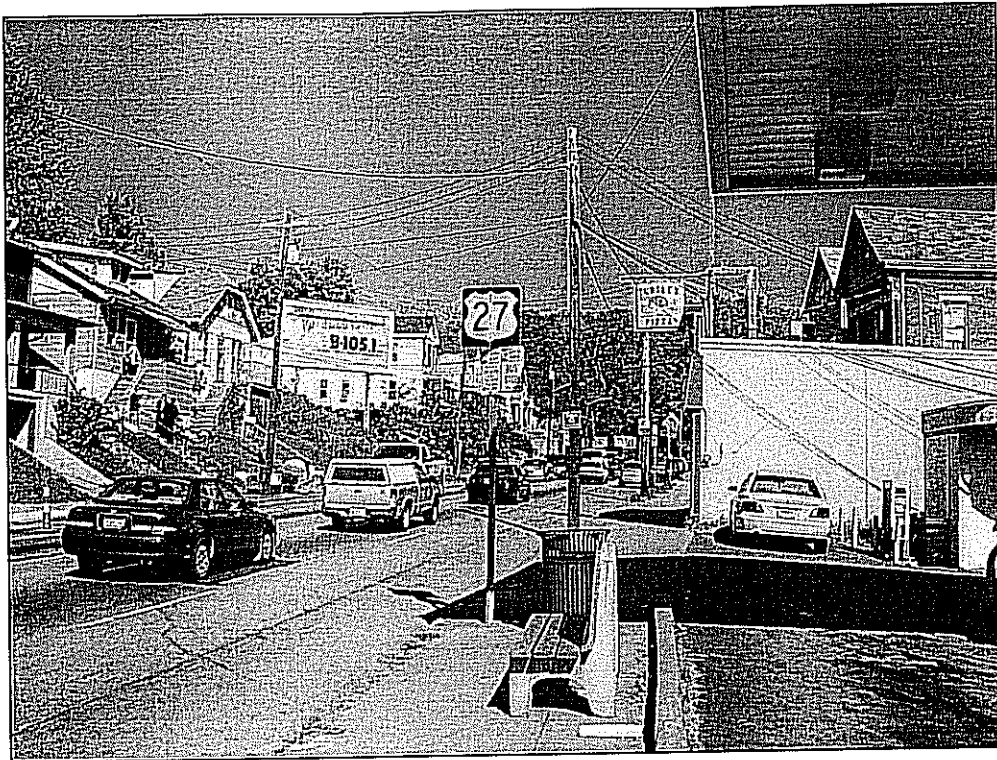


Photograph 9

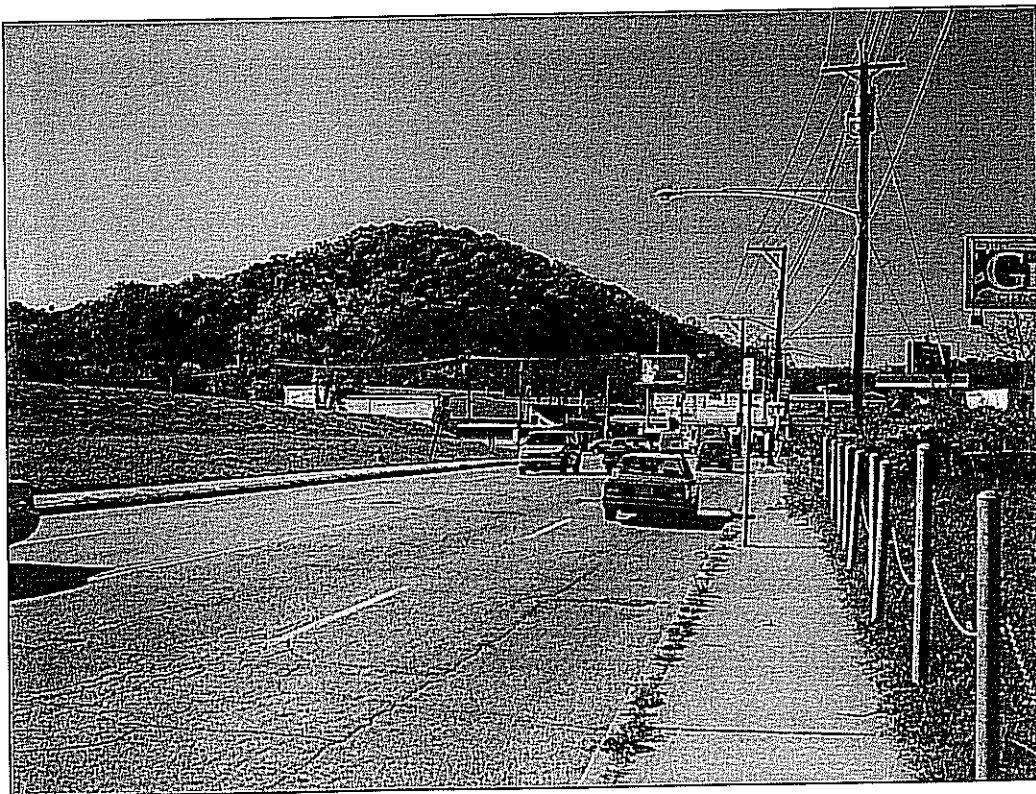


Photograph 10

Heavy Congested Area



Photograph 13



Photograph 14

Heavy Congested Area

ADDITIONAL SUPPORT INFORMATION

For Program Year 2008 (July 1, 2008 through June 30, 2009), jurisdictions shall provide the following support information to help determine which projects will be funded. Information on this form must be accurate, and where called for, based on sound engineering principles. Documentation to substantiate the individual items, as noted, is required. The applicant should also use the rating system and its' addendum as a guide. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

IF YOU ARE APPLYING FOR A GRANT, WILL YOU BE WILLING TO ACCEPT A LOAN IF ASKED BY THE DISTRICT? _____ YES X NO (ANSWER REQUIRED)

Note: Answering "Yes" will not increase your score and answering "NO" will not decrease your score.

1) What is the physical condition of the existing infrastructure that is to be replaced or repaired?

Give a statement of the nature of the deficient conditions of the present facility exclusive of capacity, serviceability, health and/or safety issues. If known, give the approximate age of the infrastructure to be replaced, repaired, or expanded. Use documentation (if possible) to support your statement. Documentation may include (but is not limited to): ODOT BR86 reports, pavement management condition reports, televised underground system reports, age inventory reports, maintenance records, etc., and will only be considered if included in the original application. Examples of deficiencies include: structural condition; substandard design elements such as widths, grades, curves, sight distances, drainage structures, etc.

Pavement:

Deficiencies: The roadway has an asphalt surface that is beginning to show signs of fatigue. The pavement is warping and shoving in the wheel paths showing signs of wear especially at the bus stops. There have been 12 citizens requests to repair potholes in the project limits. See attached printouts from the Cincinnati Customer Response Service Database (CSR).

Solution: Colerain Avenue roadway will be replaced with new concrete base and asphalt surface course. The bus pads locations will be replaced with full depth concrete pavement to prevent the asphalt shoving from recurring.

Geometric Design:

Deficiencies: Colerain Avenue has 5-10' wide lanes, which are substandard lane widths for a roadway on the National Highway System (NHS). There is poor sight distance when turning right from EB West Fork to SB Colerain because of a business at the SW corner of Colerain and West Fork. The east-west lanes are offset from each other therefore causing poor movement because of split signal phasing through the intersection.

Solution: The project will improve the lane widths to 2-13' curb lanes and 2-12' through and 1-12' turn lane. The business will be relocated and the building demolished to improve sight distance. The east-west lanes will be realigned to improve the flow of traffic and make it a single phase movement for the through traffic.

Signals:

Deficiencies: The existing signal at the Colerain/Westfork/Virginia intersection needs to be upgraded as it has reached the end of its service life. Signal equipment becomes deteriorated and has operational issues as the infrastructure reaches its service life- the City of Cincinnati establishes 20 years as the service life. The signal in this project has reached the end of the service life from both an operational perspective and safety perspective. The signal was built in 1967 and rebuilt in 1986 and is now 20 years old. There have been 21 citizens requests to repair the signal at the intersection. See attached printouts from the CSR.

Solution: The project will install a new traffic signal with new pedestrian signals and push buttons.

2) How important is the project to the safety of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the safety of the service area. The design of the project is intended to reduce existing accident rate, promote safer conditions, and reduce the danger of risk, liability or injury. (Typical examples may include the effects of the completed project on accident rates, emergency response time, fire protection, and highway capacity.) Please be specific and provide documentation if necessary to substantiate the data. The applicant must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

Safety:

Deficiencies: Crash data indicates that the crashes at the signalized intersection of Colerain/Westfork/Virginia are related to intersection congestion. The crash rate is over thirty five times the statewide average as documented in the Purpose & Need document for this project. The crash rate per million vehicle miles for the signalized intersection is 10.73, which is over five times the City's average rate for a major signalized intersection. The high accident rate is a total of 280 crashes in a three-year period from 2000-2003. The majority of the accidents were either sideswipes or rear end. These types of accidents can be attributed to the narrow lane widths and the intersection-related congestion. See attached Purpose and Need Statement HAM-US27-6.29 PID # 77484 for the documentation of the congestion, crash rates and traffic safety. Crash data also indicates that the crashes related to the Colerain/Westfork/Virginia intersection tended to spill over to the I-74 entrance ramp (un-signalized intersection). Forty five crashes followed the same pattern.

Solution: The project will install a new traffic signal with new pedestrian signals and push buttons which will correct the deficiencies. By improving the level of service for the signalized intersection and relieving congestion, the crashes at the intersection will be reduced and eliminated. To accomplish this, the signal phasing will be modified to allow for additional green time on Colerain and adding turn lanes to the intersection to reduce queuing. The Colerain\West Fork\Virginia intersection improvement will improve the safety by reducing the high accident rate, promote safer conditions for pedestrians and improve traveling conditions for bicycles. In addition, geometric improvements to the un-signalized intersection with the I-74 ramps will provide clear visual indications of lane use and mitigate the congestion in this area. Dual right turns will be made clear by realigning the curbline while the through lane will provide adequate capacity for the remainder of the traffic volume.

3) How important is the project to the health of the Public and the citizens of the District and/or service area?

Give a statement of the projects effect on the health of the service area. The design of the project will improve the overall condition of the facility so as to reduce or eliminate potential for disease, or correct concerns regarding the environmental health of the area. (Typical examples may include the effects of the completed project by improving or adding storm drainage or sanitary facilities, replacing lead jointed water lines, etc.). Please be specific and provide documentation if necessary to substantiate the data. The applicant must demonstrate the type of problems that exist, the frequency and severity of the problems and the method of correction.

The project will improve the storm drainage and pavement runoff.

4) Does the project help meet the infrastructure repair and replacement needs of the applying jurisdiction?

The jurisdiction must submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance.

Priority 1 Clifton/West Clifton Avenue Improvements

Priority 2 Spring Grove/Clifton Avenue Improvements

Priority 3 Elberon Avenue Landslide Improvements

Priority 4 Colerain/Westfork/Virginia Improvements

Priority 5 Hamilton Avenue Phase 2 Improvements

5) To what extent will the user fee funded agency be participating in the funding of the project?

(example: rates for water or sewer, frontage assessments, etc.).

Minor casting adjustments for CWW will be included with the roadway construction.

6) Economic Growth – How will the completed project enhance economic growth

Give a statement of the projects effect on the economic growth of the service area (be specific).

The proposed project will have minimal effect on economic growth.

7) Matching Funds - LOCAL

The information regarding local matching funds is to be filed by the applicant in Section 1.2 (b) of the Ohio Public Works Association's "Application For Financial Assistance" form.

8) Matching Funds - OTHER

The information regarding local matching funds is to be filed by the applicant in Section 1.2 (c) of the Ohio Public Works Association's "Application For Financial Assistance" form. If MRF funds are being used for matching funds, the MRF application must have been filed by Friday, August 31, 2007 for this project with the Hamilton County Engineer's Office. List below all "other" funding the source(s).

OKI STP funds; ODOT PID # 77484

9) Will the project alleviate serious capacity problems or respond to the future level of service needs of the district?

Describe how the proposed project will alleviate serious capacity problems (be specific).

Yes, the project will alleviate the serious capacity problem by adding standard lane widths, improving horizontal geometry to reduce delay time and the number of signal phases, installing a new updated signal, adding right turn lane to EB Virginia and adding a second LT lane from WB Virginia to SB Colerain.

For roadway betterment projects, provide the existing and proposed Level of Service (LOS) of the facility using the methodology outlined within AASHTO'S "Geometric Design of Highways and Streets" and the 1985 Highway Capacity Manual.

Existing LOS F Proposed LOS B

If the proposed design year LOS is not "C" or better, explain why LOS "C" cannot be achieved.

The project will eliminate future congestion problems within the project limits. The current Level of Service (LOS) of this intersection is "C", however, the future LOS needs of the project will not be met with the current geometry. The design year LOS drops to "F" with the existing geometry. With the proposed improvements, the design year LOS improves from "F" to "B". See the attached Synchro outputs for the capacity analysis. However, the overall capacity will be improved even further when the Colerain Phase 2 is completed in the years to follow. Recently, we have received OKI/ODOT funding for the phase 2 project which will tie into the north leg of the intersection and improve the corridor up to Leeper. (HAM US 27 6.99)

10) If SCIP/LTIP funds were granted, when would the construction contract be awarded?

If SCIP/LTIP funds are awarded, how soon after receiving the Project Agreement from OPWC (tentatively set for July 1 of the year following the deadline for applications) would the project be under contract? The Support Staff will review status reports of previous projects to help judge the accuracy of a jurisdiction's anticipated project schedule.

Number of months 9

- a.) Are preliminary plans or engineering completed? Yes X No N/A
- b.) Are detailed construction plans completed? Yes No X N/A
- c.) Are all utility coordination's completed? Yes No X N/A
- d.) Are all right-of-way and easements acquired (if applicable)? Yes No X N/A

If no, how many parcels needed for project? 45 Of these, how many are: Takes 2

Temporary 41

Permanent 2

For any parcels not yet acquired, explain the status of the ROW acquisition process for this project.

e.) Give an estimate of time needed to complete any item above not yet completed. 15 Months.

11) Does the infrastructure have regional impact?

Give a brief statement concerning the regional significance of the infrastructure to be replaced, repaired, or expanded.
The intersection is one of the Gateways into the community of Northside. In a regional role, the intersection carries over 30,000 vehicles per day, provides direct access to the I-74 entrance and exit ramps, and provides a direct link to the northern suburbs.

12) What is the overall economic health of the jurisdiction?

The District 2 Integrating Committee predetermines the jurisdiction's economic health. The economic health of a jurisdiction may periodically be adjusted when census and other budgetary data are updated.

13) Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure?

Describe what formal action has been taken which resulted in a ban of the use of or expansion of use for the involved infrastructure? Typical examples include weight limits, truck restrictions, and moratoriums or limitations on issuance of building permits, etc. The ban must have been caused by a structural or operational problem to be considered valid. Submission of a copy of the approved legislation would be helpful.

No Ban

Will the ban be removed after the project is completed? Yes _____ No _____ N/A X

14) What is the total number of existing daily users that will benefit as a result of the proposed project?

For roads and bridges, multiply current Average Daily Traffic (ADT) by 1.20. For inclusion of public transit, submit documentation substantiating the count. Where the facility currently has any restrictions or is partially closed, use documented traffic counts prior to the restriction. For storm sewers, sanitary sewers, water lines, and other related facilities, multiply the number of households in the service area by 4. User information must be documented and certified by a professional engineer or the jurisdictions' C.E.O.

Traffic: ADT 30,747 X 1.20 = 36,896 Users

Water/Sewer: Homes _____ X 4.00 = _____ Users

15) Has the jurisdiction enacted the optional \$5 license plate fee, an infrastructure levy, a user fee, or dedicated tax for the pertinent infrastructure?

The applying jurisdiction shall list what type of fees, levies or taxes they have dedicated toward the type of infrastructure being applied for. (Check all that apply)

Optional \$5.00 License Tax X

Infrastructure Levy X Specify type dedicated portion of City earnings tax

Facility Users Fee _____ Specify type _____

Dedicated Tax _____ Specify type _____

Other Fee, Levy or Tax _____ Specify type _____

**SCIP/LTIP PROGRAM
ROUND 22 - PROGRAM YEAR 2008
PROJECT SELECTION CRITERIA
JULY 1, 2008 TO JUNE 30, 2009**

NAME OF APPLICANT: CINCINNATI

NAME OF PROJECT: 11527 INTERSECTION IMPROVEMENTS

RATING TEAM: _____

General Statement for Rating Criteria

Points awarded for all items will be based on engineering experience, field verification, application information and other information supplied by the applying agency, which is deemed to be relevant by the Support Staff. The examples listed in this addendum are not a complete list, but only a small sampling of situations that may be relevant to a given project.

CIRCLE THE APPROPRIATE RATING

What is the physical condition of the existing infrastructure that is to be replaced or repaired?

- 25 - Failed
- 23 - Critical
- 20 - Very Poor
- 17 - Poor
- 15 - Moderately Poor
- ☒ 10 - Moderately Fair
- 5 - Fair Condition
- 0 - Good or Better

*Roadway in good shape (5) but
geometrics are poor. Unsur at low
to add geometrics to condition rating*

Appeal Score

Criterion 1 - Condition

Condition of the particular infrastructure to be repaired, reconstructed or replaced shall be a measure of the degree of reduction in condition from its original state. Historic pavement management data based on ASTM D6433-99 rating system may be submitted as documentation. Capacity, serviceability, safety and health shall not be considered in this criterion. Any documentation the Applicant wishes to be considered must be included in the application package.

Definitions:

Failed Condition - requires complete reconstruction where no part of the existing facility is salvageable. (E.g. Roads: complete reconstruction of roadway, curbs and base; Bridges: complete removal and replacement of bridge; Underground: removal and replacement of an underground drainage or water system.)

Critical Condition - requires partial reconstruction to maintain integrity. (E.g. Roads: reconstruction of roadway/curbs can be saved; Bridges: removal and replacement of bridge with abutment modification; Underground: removal and replacement of part of an underground drainage or water system.)

Very Poor Condition - requires extensive rehabilitation to maintain integrity. (E.g. Roads: extensive full depth, partial depth and curb repair of a roadway with a structural overlay; Bridges: superstructure replacement; Underground: repair of joints and/or replacement of pipe sections.)

Poor Condition - requires standard rehabilitation to maintain integrity. (E.g. Roads: moderate full depth, partial depth and curb repair to a roadway with no structural overlay needed or structural overlay with minor repairs to a roadway needed; Bridges: extensive patching of substructure and replacement of deck; Underground: insituform or other in ground repairs.)

Moderately Poor Condition - requires minor rehabilitation to maintain integrity. (E.g. Roads: minor full depth, partial depth or curb repairs to a roadway with either a thin overlay or no overlay needed; Bridges: major structural patching and/or major deck repair.)

Moderately Fair Condition - requires extensive maintenance to maintain integrity. (E.g. Roads: thin or no overlay with extensive crack sealing, minor partial depth and/or slurry or rejuvenation; Bridges: minor structural patching, deck repair, erosion control.)

Fair Condition - requires routine maintenance to maintain integrity. (E.g. Roads: slurry seal, rejuvenation or routine crack sealing to the roadway; Bridges: minor structural patching.)

Good or Better Condition - little to no maintenance required to maintain integrity.

Note: If the infrastructure is in "good" or better condition, it will **NOT** be considered for SCIP/LTIP funding unless it is an expansion project that will improve serviceability.

2) How important is the project to the safety of the Public and the citizens of the District and/or service area?

- ☒ 25 - Highly significant importance
- 20 - Considerably significant importance
- 15 - Moderate importance
- 10 - Minimal importance
- 5 - Poorly documented importance
- 0 - No measurable impact

- 280 accidents / 342
 - great / mill. vehicles = 10.73
 5 x 1 average

Appeal Score

Criterion 2 – Safety

The applying agency shall include in its application the type frequency, and severity of the safety problem deficiency that currently exists and how the intended project would improve the situation. For example, have there been vehicular accidents attributable to the problems cited? Have they involved injuries or fatalities? In the case of water systems, are existing hydrants non-functional? In the case of water lines, is the present capacity inadequate to provide volumes or pressure for adequate fire protection? In all cases, specific documentation is required. Mentioned problems, which are poorly documented, shall generally will not receive more than 5 points.

Note: Each project is looked at on an individual basis to determine if any aspects of this category apply. Examples given above are NOT intended to be exclusive.

3) How important is the project to the health of the Public and the citizens of the District and/or service area?

- 25 - Highly significant importance
- 20 - Considerably significant importance
- 15 - Moderate importance
- 10 - Minimal importance
- 5 - Poorly documented importance
- ☒ 0 - No measurable impact

Appeal Score

Criterion 3 – Health

The applying agency shall include in its application the type, frequency, and severity of the health problem that would be eliminated or reduced by the intended project. For example, can the problem be eliminated only by the project, or would routine maintenance be satisfactory? If basement flooding has occurred, was it storm water or sanitary flow? What complaints if any are recorded? In the case of underground improvements, how will they improve health if they are storm sewers? How would improved sanitary sewers improve health or reduce health risk? In all cases, quantified documentation is required. Mentioned problems, which are poorly documented, shall generally will not receive more than 5 points.

Note: Each project is looked at on an individual basis to determine if any aspects of this category apply. Examples given above are NOT intended to be exclusive.

4) Does the project help meet the infrastructure repair and replacement needs of the applying agency?

Note: Applying agency's priority listing (part of the Additional Support Information) must be filed with application(s).

- 25 - First priority project
- 20 - Second priority project
- 15 - Third priority project
- ☒ 10 - Fourth priority project
- 5 - Fifth priority project or lower

Appeal Score

Criterion 4 – Jurisdiction's Priority Listing

The applying agency must submit a listing in priority order of the projects for which it is applying. Points will be awarded on the basis of most to least importance. The form is included in the Additional Support Information.

5) To what extent will a user fee funded agency be participating in the funding of the project?

- ☒ 10 - Less than 10%
- ☐ 9 - 10% to 19.99%
- ☐ 8 - 20% to 29.99%
- ☐ 7 - 30% to 39.99%
- ☐ 6 - 40% to 49.99%
- ☐ 5 - 50% to 59.99%
- ☐ 4 - 60% to 69.99%
- ☐ 3 - 70% to 79.99%
- ☐ 2 - 80% to 89.99%
- ☐ 1 - 90% to 95%
- ☐ 0 - Above 95%

Appeal Score

Criterion 5 – User Fee-funded Agency Participation

To what extent will a user fee funded agency be participating in the funding of the project? (Example: rates for water or sewer, frontage assessments, etc.). The applying agency must submit documentation.

6) Economic Growth – How the completed project will enhance economic growth (See definitions).

10 – The project will directly secure new employment

Appeal Score

5 – The project will permit more development

☒ 0 – The project will not impact development

Criterion 6 – Economic Growth

Will the completed project enhance economic growth and/or development in the service area?

Definitions:

Secure new employment: The project as designed will secure development/employers, which will immediately add new permanent employees to the jurisdiction. The applying agency must submit details.

Permit more development: The project as designed will permit additional business development/employment. The applying agency must supply details.

The project will not impact development: The project will have no impact on business development.

Note: Each project is looked at on an individual basis to determine if any aspects of this category apply.

7) Matching Funds - **LOCAL**

10 - This project is a loan or credit enhancement

10 – 50% or higher

8 – 40% to 49.99%

6 – 30% to 39.99%

☒ 4 – 20% to 29.99%

☒ 2 – 10% to 19.99%

☒ 0 – Less than 10%

List total percentage of "Local" funds 25 %

Criterion 7 – Matching Funds – Local

The percentage of matching funds which come directly from the budget of the applying agency. Ten points shall be awarded if a loan request is at least 50% of the total project cost. (If the applying agency is not a user fee funded agency, any funds to be provided by a user fee generating agency will be considered "Matching Funds – Other").

8)

Matching Funds – OTHER

List total percentage of "Other" funds 80 %

- ☒ 10 – 50% or higher
- 8 – 40% to 49.99%
- 6 – 30% to 39.99%
- 4 – 20% to 29.99%
- 2 – 10% to 19.99%
- 1 – 1% to 9.99%
- ☒ 0 – Less than 1%

List below each funding source and percentage

<u>DDOT PID</u>	<u>80</u> %
_____	_____ %
_____	_____ %
_____	_____ %
_____	_____ %

Criterion 8 – Matching Funds - Other

The percentage of matching funds that come from funding sources other than those mentioned in Criterion 7. A letter from the outside funding agency stating their financial participation in the project and the amount of funding is required to receive points. For MRF, a copy of the current application form filed with the Hamilton County Engineer's Office meets the requirement.

9)

Will the project alleviate serious capacity problems or hazards or respond to the future level of service needs of the district?

- ☒ 10 - Project design is for future demand.
- 8 - Project design is for partial future demand.
- 6 - Project design is for current demand.
- 4 - Project design is for minimal increase in capacity.
- 2 - Project design is for no increase in capacity.

07 C to B
27 F to B

Appeal Score

Criterion 9 – Alleviate Capacity Problems

The applying agency shall provide a narrative, along with pertinent support documentation, which describe the existing deficiencies and showing how congestion will be reduced or eliminated and how service will be improved to meet the needs of any expected growth or development. A formal capacity analysis accompanying the application would be beneficial. Projected traffic or demand should be calculated as follows:

Formula:

Existing users x design year factor = projected users

Design Year	Design year factor		
	Urban	Suburban	Rural
20	1.40	1.70	1.60
10	1.20	1.35	1.30

Definitions:

Future demand – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for twenty-year projected demand or fully developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

Partial future demand – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service for ten-year projected demand or partially developed area conditions. Justification must be supplied if the area is already largely developed or undevelopable and thus the projection factors used deviate from the above table.

Current demand – Project will eliminate existing congestion or deficiencies and will provide sufficient capacity or service only for existing demand and conditions.

Minimal increase – Project will reduce but not eliminate existing congestion or deficiencies and will provide a minimal but less than sufficient increase in existing capacity or service for existing demand and conditions.

No increase – Project will have no effect on existing congestion or deficiencies and provide no increase in capacity or service for existing demand and conditions.

10) Readiness to Proceed - If SCIP/LTIP funds are granted, when would the construction contract be awarded?

5 - Will be under contract by December 31, 2008 and no delinquent projects in Rounds 19 & 20

3 - Will be under contract by March 31, 2009 and/or one delinquent project in Rounds 19 & 20 3/1/09

0 - Will not be under contract by March 31, 2009 and/or more than one delinquent project in Rounds 19 & 20

Criterion 10 – Readiness to Proceed

The Support Staff will assign points based on engineering experience and status of design plans. A project is considered delinquent when it has not received a notice to proceed within the time stated on the original application and no time extension has been granted by the OPWC. An applying agency receiving approval for a project and subsequently canceling the same after the bid date on the application will receive zero (0) points under this round and the following round.

11) Does the infrastructure have regional impact? Consider origination and destination of traffic, functional classifications, size of service area, and number of jurisdictions served, etc.

10 – Major Impact

8 – Significant Impact

6 – Moderate Impact

4 – Minor Impact

2 – Minimal or No Impact

Appeal Score

Criterion 11 - Regional Impact

The regional significance of the infrastructure that is being repaired or replaced.

Definitions:

Major Impact – Roads: Major Arterial: A direct connector to an Interstate Highway; Arterials are intended to provide a greater degree of mobility rather than land access. Arterials generally convey large traffic volumes for distances greater than one mile. A major arterial is a highway that is of regional importance and is intended to serve beyond the county. It may connect urban centers with one another and/or with outlying communities and employment or shopping centers. A major arterial is intended primarily to serve through traffic.

Significant Impact – Roads: Minor Arterial: A roadway, also serving through traffic, that is similar in function to a major arterial, but operates with lower traffic volumes, serves trips of shorter distances (but still greater than one mile), and may provide a higher degree of property access than do major arterials.

Moderate Impact – Roads: Major Collector: A roadway that provides for traffic movement between local roads/streets and arterials or community-wide activity centers and carries moderate traffic volumes over moderate distances (generally less than one mile). Major collectors may also provide direct access to abutting properties, such as regional shopping centers, large industrial parks, major subdivisions and community-wide recreational facilities, but typically not individual residences. Most major collectors are also county roads and are therefore through streets.

Minor Impact – Roads: Minor Collector: A roadway similar in functions to a major collector but which carries lower traffic volumes over shorter distances and has a higher degree of property access. Minor collectors may serve as main circulation streets within large, residential neighborhoods. Most minor collectors are also township roads and streets and may, or may not, be through streets.

Minimal or No Impact - Roads: Local: A roadway that is primarily intended to provide access to abutting properties. It tends to accommodate lower traffic volumes, serves short trips (generally within neighborhoods), and provides connections preferably only to collector streets rather than arterials.

12) What is the overall economic health of the jurisdiction?

10 Points

☒ 8 Points

6 Points

4 Points

2 Points

Criterion 12 – Economic Health

The District 2 Integrating Committee predetermines the applying agency's economic health. The economic health of a jurisdiction may periodically be adjusted when census and other budgetary data are updated.

13) Has any formal action by a federal, state, or local government agency resulted in a partial or complete ban of the usage or expansion of the usage for the involved infrastructure?

10 - Complete ban, facility closed

Appeal Score

8 – 80% reduction in legal load or 4-wheeled vehicles only

7 – Moratorium on future development, *not* functioning for current demand

6 – 60% reduction in legal load

5 - Moratorium on future development, functioning for current demand

4 – 40% reduction in legal load

2 – 20% reduction in legal load

☒ 0 - Less than 20% reduction in legal load

Criterion 13 - Ban

The applying agency shall provide documentation to show that a facility ban or moratorium has been formally placed. The ban or moratorium must have been caused by a structural or operational problem. Points will only be awarded if the end result of the project will cause the ban to be lifted.

4) What is the total number of existing daily users that will benefit as a result of the proposed project?

☒ 10 - ~~16,000~~ 30,000 or more

Appeal Score

8 - ~~12,000~~ 21,000 to 29,999 ~~15,999~~

6 - ~~8,000~~ 12,000 to 20,999 ~~11,999~~

4 - ~~4,000~~ 3,000 to 11,999 ~~7,999~~

2 - ~~3,999~~ 2,999 and under

Criterion 14 - Users

The applying agency shall provide documentation. A registered professional engineer or the applying agency's C.E.O must certify the appropriate documentation. Documentation may include current traffic counts, households served, when converted to a measurement of persons. Public transit users are permitted to be counted for the roads and bridges, but only when certifiable ridership figures are provided.

5) Has the applying agency enacted the optional \$5 license plate fee, an infrastructure levy, a user fee, or dedicated tax for the pertinent infrastructure? (*Provide documentation of which fees have been enacted.*)

☒ 5 - Two or more of the above

Appeal Score

3 - One of the above

0 - None of the above

*dedicated portion of earnings tax
\$5 license fee*

Criterion 15 – Fees, Levies, Etc.

The applying agency shall document (in the "Additional Support Information" form) which type of fees, levies or taxes they have dedicated toward the type of infrastructure being applied for.

























CLOSED	10/06/2004	PUB SERV	NOD ROW MAINTENANCE	Dead animal, 1st shift public
CLOSED	10/15/2004	CRC	REC-OUTDOOR MAINTENANCE	Litter, Recreation Property
CLOSED	10/20/2004	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traffic/ped/school repair
CLOSED	10/28/2004	PUB SERV	GRAFFITI	Graffiti, removal
CLOSED	12/12/2004	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	12/21/2004	PUB SERV	WINTER OPERATIONS	Slippery streets, request
CLOSED	12/22/2004	PUB SERV	WINTER OPERATIONS	Slippery streets, request
CLOSED	12/22/2004	PUB SERV	WINTER OPERATIONS	Slippery streets, request haz
CLOSED	01/04/2005	PUB SERV	EMERGENCY SERVICE	Pothole, repair haz
CLOSED	01/12/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	01/14/2005	PUB SERV	WINTER OPERATIONS	Slippery streets, request haz
CLOSED	01/20/2005	PUB SERV	WINTER OPERATIONS	Slippery streets, request
CLOSED	01/25/2005	PUB SERV	ASPHALT	Pothole, repair
CLOSED	01/31/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	02/02/2005	PUB SERV	NOD ROW MAINTENANCE	Dead animal, 1st shift private
CLOSED	02/02/2005	PUB SERV	WINTER OPERATIONS	Slippery streets, request haz
CLOSED	02/05/2005	PUB SERV	NOD ROW MAINTENANCE	Dead animal, 2nd shift public
CLOSED	02/05/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	02/08/2005	NOTE	DT-T-TRFFCPRITS	Sign, TE new/change
CLOSED	02/12/2005	PUB SERV	ASPHALT	Pothole, repair
CLOSED	02/22/2005	PUB SERV	EMERGENCY SERVICE	Pothole, repair haz
CLOSED	03/18/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	03/29/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	03/31/2005	PUB SERV	ASPHALT	Pothole, repair
CLOSED	04/05/2005	PUB SERV	EMERGENCY SERVICE	Pothole, repair haz
CLOSED	04/07/2005	PUB SERV	NOD ROW MAINTENANCE	Dead animal, 3rd shift public
CLOSED	04/07/2005	PUB SERV	NOD ROW MAINTENANCE	Dead animal, 1st shift public
CLOSED	04/15/2005	CWW	CWW DEFAULT	Default, CWW
CLOSED	04/15/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	04/16/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	04/29/2005	PUB SERV	ASPHALT	Pothole, repair
CLOSED	05/11/2005	PUB SERV	ASPHALT	Pothole, repair
CLOSED	05/14/2005	PUB SERV	EMERGENCY SERVICE	Spill, non toxic after hours
CLOSED	05/20/2005	PUB SERV	ASPHALT	Pothole, repair
CLOSED	06/05/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	06/05/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	06/22/2005	PUB SERV	NIP	Street cleaning, sweeping
CLOSED	07/11/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Gym shoes, wire
CLOSED	07/29/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
CLOSED	08/12/2005	PUB SERV	EMERGENCY SERVICE	Tree, after hrs no storm
CLOSED	08/17/2005	MSD	MSD DEFAULT	Default, msd
CLOSED	08/30/2005	PARKS	URBAN FORESTRY	Tree, reg. hrs or during storm
CLOSED	09/08/2005	PUB SERV	UTILITIES	Cinergy 7pm-7am
CLOSED	11/03/2005	PUB SERV	STREET CLEANING	Dead animal, 1st shift public
CLOSED	11/05/2005	PUB SERV	STREET CLEANING	Dead animal, 1st shift public
CLOSED	11/05/2005	PUB SERV	STREET CLEANING	Dead animal, 1st shift private
CLOSED	11/15/2005	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair

SSR05066527	CLOSED	12/08/2005	POLICE	POLICE-DEFAULT	Default, police (and junk veh)
SSR05066587	CLOSED	12/08/2005	PUB SERV	ASPHALT	Pothole, repair
SSR05067609	CLOSED	12/13/2005	PUB SERV	WINTER OPERATIONS	Slippery streets, request haz
SSR05068991	CLOSED	12/23/2005	PUB SERV	STREET CLEANING	Street cleaning, 1st haz
SSR06000980	CLOSED	01/07/2006	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
SSR06001001	CLOSED	01/07/2006	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
SSR06001002	CLOSED	01/07/2006	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
SSR06019520	CLOSED	03/17/2006	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
SSR06022017	CLOSED	03/27/2006	PUB SERV	STREET CLEANING	Dead animal, 2nd shift public
SSR06055886	CLOSED	04/05/2006	PUB SERV	ASPHALT	Pothole, repair
SSR06067103	CLOSED	05/02/2006	PUB SERV	EMERGENCY SERVICE	Street plates, move/replace
SSR06068539	CLOSED	05/08/2006	PUB SERV	EMERGENCY SERVICE	Barricade, setup/remove haz
SSR06075599	CLOSED	06/05/2006	PUB SERV	PS-PROP MNTNCE DEPT PROP	Tall grass/weeds, PS property
SSR06077198	CLOSED	06/11/2006	PUB SERV	ASPHALT	Pothole, repair
SSR06084447	CLOSED	07/11/2006	PUB SERV	STREET CLEANING	Dead animal, 1st shift
SSR06085547	CLOSED	07/14/2006	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
SSR06086230	CLOS-NO	07/18/2006	HEALTH	HEALTH-LITTER	Notice, posting on a pole
SSR06087238	CLOSED	07/23/2006	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
SSR06091149	CLOSED	08/08/2006	PUB SERV	TRAFFIC SERVICES BUREAU	Signal, traf/ped/school repair
SSR06097146	DISPATCH	09/05/2006	PUB SERV	STREET CLEANING	Dead animal, 1st shift

Baseline

09/07/2006

Lanes, Volumes, Timings






												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			6%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		1	1		0	1		0	0		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50		50	50			50	
Trailing Detector (ft)	0	0	0	0	0		0	0			0	
Turning Speed (mph)	15		9	15		5	15		9	15		5
Satd. Flow (prot)	0	3497	1583	1681	1694	0	1770	3465	0	0	3392	0
Flt Perm.		0.796		0.950	0.317		0.950					
Satd. Flow (perm)	0	2817	1583	1681	540	0	1770	3465	0	0	3392	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76		13			23			8	
Volume (vph)	68	218	68	263	158	62	182	1131	179	0	621	54
Confl. Peds. (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Lane Group Flow (vph)	0	318	76	263	274	0	202	1456	0	0	750	0
Turn Type	Split		Over	Split			Prot					
Protected Phases	8	8	5	4	4		5	2			6	
Permitted Phases												
Detector Phases	8	8	5	4	4		5	2			6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Minimum Split (s)	20.0	20.0	8.0	20.0	20.0		8.0	22.0			22.0	
Total Split (s)	20.0	20.0	26.0	33.0	33.0	0.0	26.0	67.0	0.0	0.0	41.0	0.0
Total Split (%)	17%	17%	22%	28%	28%	0%	22%	56%	0%	0%	34%	0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	4.1			4.1	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	1.9			1.9	
Lead/Lag			Lead				Lead				Lag	
Lead-Lag Optimize?			Yes				Yes				Yes	
Recall Mode	Max	Max	Max	Max	Max		Max	Max			Max	
Lane Grp Cap (vph)		495	365	420	433		339	1859			1080	
v/s Ratio Prot			0.04	0.16			0.11	0.42			0.22	
v/s Ratio Perm		0.11			0.50							
Critical LG?		Yes			Yes			Yes				
Act Effct Green (s)		17.0	23.0	30.0	30.0		23.0	64.0			38.0	
Actuated g/C Ratio		0.14	0.19	0.25	0.25		0.19	0.53			0.32	
v/c Ratio		0.64	0.21	0.63	0.63		0.60	0.78			0.69	
Uniform Delay, d1		48.6	0.0	40.0	38.0		44.2	22.0			35.5	
Percentile Delay		49.0	9.2	40.8	38.8		45.0	22.5			35.9	
Percentile LOS		D	A	D	D		D	C			D	

Baseline

09/07/2006

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 75
 Control Type: Pretimed
 Total Lost Time: 9
 Sum of Critical v/s Ratios: 0.67
 Intersection v/c Ratio: 0.72
 Intersection Percentile Signal Delay: 31.9
 Intersection Percentile LOS: C






















Splits and Phases: 6: West Fork & Colerain Ave

 02	 04	 08
67 s	33 s	20 s
 05	 06	
26 s	41 s	

Baseline

09/06/2006

Lanes, Volumes, Timings








												
Lane Group	EBL2	EBL	EBR	NBL	NBT	NBR	SBL	SBT	SBR	SWL	SWR	SWR2
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%		0%		
Storage Length (ft)		0	0	0		0	0		0	0	0	
Storage Lanes		1	1	1		0	0		0	2	0	
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50			50		50	50	
Trailing Detector (ft)	0	0	0	0	0			0		0	0	
Turning Speed (mph)	15	15	9	15		9	15		9	15	9	9
Satd. Flow (prot)	1770	1770	1583	1770	3539	0	0	3476	0	3433	1583	0
Flt Perm.	0.950	0.950		0.488						0.950		
Satd. Flow (perm)	1770	1770	1583	909	3539	0	0	3476	0	3433	1583	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			100					22			22	
Volume (vph)	40	80	90	270	1680	0	0	290	40	190	80	30
Confl. Peds. (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%		0%		
Lane Group Flow (vph)	44	89	100	300	1867	0	0	366	0	211	122	0
Turn Type	Prot	Pm+Ov		D.P+P						Prot		
Protected Phases	3	8	1	1	6			2		7	4	
Permitted Phases			8	2								
Detector Phases	3	8	1	1	6			2		7	4	
Minimum Initial (s)	4.0	1.0	1.0	1.0	4.0			1.0		4.0	4.0	
Minimum Split (s)	9.0	6.0	6.0	6.0	9.5			6.0		9.0	21.0	
Total Split (s)	9.0	18.0	15.0	15.0	50.0	0.0	0.0	35.0	0.0	12.0	21.0	0.0
Total Split (%)	11%	23%	19%	19%	63%	0%	0%	44%	0%	15%	26%	0%
Yellow Time (s)	3.0	3.0	3.0	3.0	3.0			3.0		3.0	3.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0			2.0		2.0	2.0	
Lead/Lag	Lead	Lag	Lead	Lead				Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes		Yes	Yes	
Recall Mode	None	None	Min	Min	Min			None		None	None	
Lane Grp Cap (vph)	103	250	677	713	2238			1350		337	304	
v/s Ratio Prot	0.02	0.05	0.03	0.09	0.53			0.10		0.06	0.07	
v/s Ratio Perm			0.02	0.16								
Critical LG?					Yes					Yes	Yes	
Act Effct Green (s)	6.6	11.4	28.0	41.2	46.3			26.5		9.2	15.2	
Actuated g/C Ratio	0.09	0.16	0.40	0.61	0.69			0.39		0.13	0.22	
v/c Ratio	0.27	0.31	0.14	0.40	0.77			0.26		0.46	0.34	
Uniform Delay, d1	31.9	27.2	0.0	5.8	10.0			13.9		30.4	20.6	
Percentile Delay	35.1	29.2	4.2	7.2	13.7			13.5		32.0	22.4	
Percentile LOS	D	C	A	A	B			B		C	C	

Baseline

09/06/2006

Area Type: Other
 Cycle Length: 80
 Actuated Cycle Length: 67.2
 Natural Cycle: 80
 Control Type: Semi Act-Uncoord
 Total Lost Time: 9
 Sum of Critical v/s Ratios: 0.64
 Intersection v/c Ratio: 0.72
 Intersection Percentile Signal Delay: 15.1
 Intersection Percentile LOS: B






















Splits and Phases: 2: West Fork & Virginia

 01	 02	 03	 04
15s	35s	9s	21s
 06	 07	 08	
50s	12s	18s	

Baseline

09/06/2006

Lanes, Volumes, Timings






												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			6%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		1	1		0	1		0	0		0
Total Lost Time (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Leading Detector (ft)	50	50	50	50	50		50	50			50	
Trailing Detector (ft)	0	0	0	0	0		0	0			0	
Turning Speed (mph)	15		9	15		5	15		9	15		5
Satd. Flow (prot)	0	3479	1583	1681	1678	0	1770	3465	0	0	3392	0
Flt Perm.		0.722		0.950			0.950					
Satd. Flow (perm)	0	2555	1583	1681	1678	0	1770	3465	0	0	3392	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			129		20			26			9	
Volume (vph)	116	218	116	116	218	116	311	1934	307	0	1062	92
Confl. Peds. (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Lane Group Flow (vph)	0	371	129	129	371	0	346	2490	0	0	1282	0
Turn Type	Split		Over	Split			Prot					
Protected Phases	8	8	5	4	4		5	2			6	
Permitted Phases												
Detector Phases	8	8	5	4	4		5	2			6	
Minimum Initial (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0			4.0	
Minimum Split (s)	20.0	20.0	8.0	20.0	20.0		8.0	22.0			22.0	
Total Split (s)	20.0	20.0	26.0	25.0	25.0	0.0	26.0	75.0	0.0	0.0	49.0	0.0
Total Split (%)	17%	17%	22%	21%	21%	0%	22%	63%	0%	0%	41%	0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	4.1			4.1	
All-Red Time (s)	0.5	0.5	0.5	0.5	0.5		0.5	1.9			1.9	
Lead/Lag			Lead				Lead				Lag	
Lead-Lag Optimize?			Yes				Yes				Yes	
Recall Mode	Max	Max	Max	Max	Max		Max	Max			Max	
Lane Grp Cap (vph)		493	408	308	324		339	2089			1306	
v/s Ratio Prot			0.06	0.08	0.21		0.20	0.72			0.38	
v/s Ratio Perm		0.15										
Critical LG?		Yes			Yes			Yes				
Act Effct Green (s)		17.0	23.0	22.0	22.0		23.0	72.0			46.0	
Actuated g/C Ratio		0.14	0.19	0.18	0.18		0.19	0.60			0.38	
v/c Ratio		0.75	0.32	0.42	1.15		1.02	1.19			0.98	
Uniform Delay, d1		49.4	0.0	43.3	46.0		48.5	23.7			36.3	
Percentile Delay		51.0	7.2	44.0	119.6		89.9	110.4			50.9	
Percentile LOS		D	A	D	F		F	F			D	

Baseline

09/06/2006

Area Type: Other
 Cycle Length: 120
 Actuated Cycle Length: 120
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
 Natural Cycle: 150
 Control Type: Pretimed
 Total Lost Time: 9
 Sum of Critical v/s Ratios: 1.03
 Intersection v/c Ratio: 1.12
 Intersection Percentile Signal Delay: 86.2
 Intersection Percentile LOS: F

Splits and Phases: 6: West Fork & Colerain Ave

 ø2	 ø4	 ø8
75 s	25 s	20 s
 ø5	 ø6	
26 s	49 s	

PURPOSE & NEED STATEMENT

Prepared for:

The City of Cincinnati

HAM-27-6.49
Colerain Avenue
(PID: 77484)

Prepared by:



M•E Companies, Inc.
635 Brooksedge Boulevard
Westerville, OH 43081
614-818-4900

IDENTIFIED NEEDS

As traffic congestion continues to increase due to increased traffic in the area and an unfinished transportation connector, improving the flow of traffic at the Colerain intersection becomes more important. Accordingly, the identified needs of the project are traffic-related and focus on three primary elements: congestion, traffic safety, and intercity and regional mobility.

CONGESTION

To determine the efficiency of the Colerain Avenue, Virginia Avenue, and West Fork Road intersection, the existing 2004 Level of Service (LOS) was compared to the future year 2030 LOS without improvements. LOS is a measurement of delay a motorist will encounter at an intersection. A LOS of A is the best condition and represents free flowing traffic at posted speed limits. LOS B is very close to a free flowing situation. LOS C is nearly free flowing traffic but maneuvering is beginning to be hampered. LOS D has reduced travel speeds and maneuverability is limited. LOS E is the maximum capacity of the roadway. At LOS F, the roadway is over-saturated, and traffic experiences delays and stop-and-go conditions. For design purposes, LOS C is the target level of service in rural areas and LOS D is an acceptable design goal in urban areas.

The current (2004) Annual Average Daily Traffic (AADT) varies throughout the length of the Colerain Avenue, Virginia Avenue, West Fork Road intersection, ranging from 3,528 along Colerain Avenue between the I-74 exit and entrance roads to 13,903 on the entrance lane to I-74 (see Exhibit 11). The AADT for Colerain Avenue varies from 24,488 north of the Virginia Avenue/West Fork Road intersection to 30,747 south of the intersection. The I-74 interchange exit and entrance ramps to Colerain Avenue, which are in close proximity to the West Fork/Virginia intersection, are the primary traffic influence on this intersection. Of the 17,431 vehicles traveling in the southbound direction, 13,903 use the I-74 entrance ramp. There are 12,358 vehicles per day that exit I-74 at Colerain Avenue and 9,603 turn left towards the Virginia Avenue/West Fork Road intersection.

An overall intersection LOS F is experienced during the AM Peak period with an average intersection delay of 98.3 seconds. An intersection LOS D is experienced during the PM Peak period with an average intersection delay of 39.8 seconds. In 2030, LOS F is expected to occur during both the AM and PM Peak periods with intersection delays of 355.3 and 134.1 seconds respectively.

Based on the traffic data shown in Exhibit 12 and Highway Capacity Analysis using HCS2000, the intersection already has five movements that operate at LOS E or F during the AM peak period and four movements that operate at LOS E or F during the PM peak period. Considerable queuing was observed on the Colerain southbound

approach to the intersection during the morning peak. The intersection presently operates very close to capacity during the morning and evening peak periods.

For purposes of year 2030 HCS2000 analyses, the 2004 current year peak period volumes were inflated by a factor of 1.02 per year compounded to estimate design year turning movement volumes. A Certified Traffic submission will be prepared using OKI model input and growth trends along US 27 for ODOT's approval for use in evaluating build alternatives. However, using the factored 2004 movements, by the design year of 2030, the intersection is expected to have at least five movements that operate at LOS F during the AM peak period and six movements that operate at LOS E or F during the PM peak period. Based upon the high volumes and low LOS in the design year, the existing intersection configuration will be well over-capacity and will require capacity improvements to avoid a grid-lock situation.

Intersection of US 27 (Colerain) and Virginia/West Fork

2004 Weekday AM Peak Hour LOS			
Approach	Approach Delay (sec)	Approach LOS	Intersection LOS
Eastbound	77.7	E	F
Westbound	104.9	F	
Northbound	33.0	C	
Southbound	126.2	F	

2004 Weekday PM Peak Hour LOS			
Approach	Approach Delay (sec)	Approach LOS	Intersection LOS
Eastbound	62.2	E	D
Westbound	52.2	D	
Northbound	34.5	C	
Southbound	33.9	C	

2030 Weekday AM Peak Hour LOS			
Approach	Approach Delay (sec)	Approach LOS	Intersection LOS
Eastbound	250.9	F	F
Westbound	376.2	F	
Northbound	48.9	D	
Southbound	493.2	F	

2030 Weekday PM Peak Hour LOS			
Approach	Approach Delay (sec)	Approach LOS	Intersection LOS
Eastbound	111.2	F	F
Westbound	114.1	F	
Northbound	181.4	F	
Southbound	52.6	D	

TRAFFIC SAFETY

The crash data for the study area near the intersection at Colerain Avenue, Virginia Avenue, and West Fork Road was collected and reviewed to identify patterns or other common features. A total of 280 crashes occurred within the intersection analysis area during the 2000-2003 three-year period. The typical crash was either a rear-end crash or a sideswipe pass that occurred on a straight section of roadway, at a non-intersection location, in daylight conditions, on dry pavement (see Exhibit 13). Of the 280 crashes, 40 percent or 111 crashes occurred at the Colerain Avenue, Virginia Avenue, and West Fork Road intersection. Though many of these crashes were not located within the intersection, the data suggests they were caused by intersection-related congestion and traffic queues, due to the number of rear-end crashes and sideswipe passing crashes. Forty-five other crashes were recorded on the I-74 entrance and exit ramps. The typical crash followed the same patterns as at the Colerain Avenue, Virginia Avenue, and West Fork Road intersection. The following is a table listing section links followed by the statewide average crash rate and the respective Colerain Avenue intersection link rate.

Colerain/Virginia/West Fork Link & Intersection Crash Data					
Roadway Description	Section Link Length (Mi.)	ODOT Base Crash Rate (Crashes /AMVM)	Link Crash Rate (Total/ AMVM)	Crash Rate Factor	Total Crashes in Link
Colerain Avenue Interchange Area Total	---	0.85	29.91	35.19	280
Colerain Avenue	0.400	0.72	56.81	78.90	268
Florida Ave. to I-74 WB Ramp	0.110	0.72	12.52	17.39	15
I-74 WB Exit Ramp to I-74 EB Ramp	0.060	0.72	---	---	---
I-74 EB Ramp to Virginia Ave./West Fork Rd.	0.060	0.72	---	---	---
Virginia Ave./West Fork Rd. to Ammon Ave.	0.150	0.72	26.33	36.57	40
Ammon Ave. to Lambston St.	0.020	0.72	---	---	---
Colerain and I-74 WB Ramp Intersection	---	0.48	2.03	4.23	31
Colerain and I-74 EB Ramp Intersection	---	0.11	0.92	8.36	14
Colerain and Virginia/West Fork Intersection	---	0.48	10.73	22.35	111
Colerain and Ammon Intersection	---	0.11	5.53	50.27	56
Colerain and Lambston Intersection	---	0.11	3.06	27.82	31
West Fork Road	0.170	1.45	76.45	52.72	111
Hays Ave. to Colerain	0.170	1.45	---	---	---
West Fork and Hays Intersection	---	0.09	---	---	---
West Fork and Colerain Intersection	---	0.48	10.63	22.15	111
Virginia Avenue	0.270	0.68	38.52	56.65	123
Colerain to Chase Ave.	0.270	0.68	3.76	5.53	12
Virginia and Colerain Intersection	---	0.48	10.63	22.15	111
Virginia and Chase Intersection	---	0.11	---	---	---

The statewide average crash rate (ODOT Base Rate) for a 4-lane urban arterial is 0.72 crashes/Annual Million Vehicle Miles – AMVM. Crash rate calculations indicate that most sections of the Colerain Avenue intersection area have crash rates (Link Crash

Rate) that exceed the statewide average rate. The Crash Rate Factor column shows rates greater than the statewide average with numbers larger than 1.0. The Crash Rate Factor is the Link Rate divided by the ODOT Base Rate. Taken as a whole, the crash rate within the intersection study area is 35 times greater than the statewide average. There are no links with a rate below the statewide average while the worst link has a rate that is 50 times greater than the statewide average. The Colerain Avenue, Virginia Avenue, and West Fork Road intersection has a crash rate of 10.73 crashes per Annual Million Entering Vehicles and greatly exceeds the ODOT statewide average rate of 0.48 crashes/AMV. Crash Severity (INJ ACC+FAT ACC/TOTAL ACC) within the study area and at the focus intersection does not appear to be a problem as most of the crashes do not involve injuries or fatalities. The severity rate at the Colerain Avenue, Virginia Avenue, and West Fork Road intersection is 20%, which is below the norm (30%) for this type of intersection. The overall crash patterns and rates are indicative of poor LOS and congestion. Relieving the congestion and improving the LOS at the Colerain Avenue, Virginia Avenue, and West Fork Road intersection should result in a reduction of crashes that occur at this location.

INTERCITY AND REGIONAL MOBILITY

Mobility has historically played an important role in the decisions made and extenuating circumstances that have affected and will affect the community of Northside and the surrounding neighborhoods. Key to the issue of mobility is the importance of the local roadway network and its connection point to the I-74/I-75 freeway network. In this part of Northside, the access point between the local arterials and the freeway system is the Colerain Avenue, Virginia Avenue, and West Fork Road intersection. Because of these issues, the intersection has become a gateway for Northside, the surrounding communities and neighborhoods, and the region.

As for any transportation network, the ideal state of mobility is to be able to travel at the highest legal speed limit, unencumbered by delays due to traffic congestion, roadway geometry (curvatures and grades) or reduced speed zones. Any delays encountered, such as other traffic, signals, or roadway characteristics, add travel time to the trip. These delays reduce the percentage of the trip that can be completed while traveling at the legal posted speed limit. Therefore, the mobility afforded by the transportation network in the study area, including the connections of US 27 and 127, I-74, and the various local streets are important. As described in preceding paragraphs, the Colerain Avenue intersection, and related transportation links do not provide this ideal state of mobility. Rather, mobility is negatively impacted, especially during peak periods and this causes a burden on the people that use and live in these neighborhoods.

Historically, travel patterns in the project study area have been affected by other highway projects. The Northside area was directly impacted in the late 1960s in efforts

CONCLUSIONS

CONGESTION

The Colerain Avenue, Virginia Avenue, and West Fork Road intersection has a poor level of service, especially for key turning movements, high AADT and poor intersection geometry. Currently, the intersection operates at capacity during the morning and evening peak-hour periods, though over time the intersection will need capacity improvements to avoid gridlock situations. The poor levels of service identified in the project area can be dramatically improved by realignment of the Colerain intersection and additional turning lanes. These improvements will facilitate movement of the additional traffic that is projected by the year 2030.

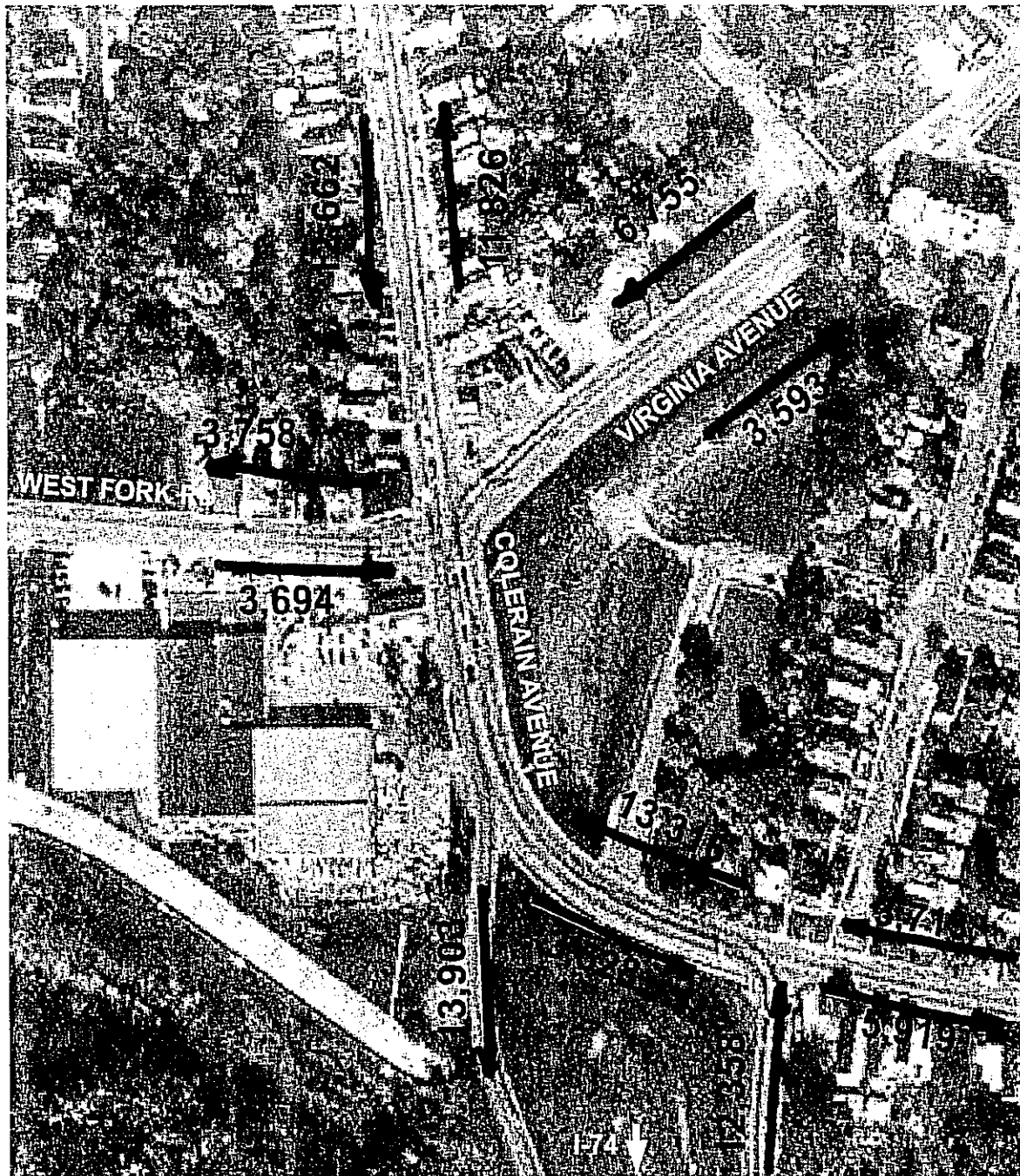
SAFETY

Recent crash data suggests that crashes at the Colerain Avenue, Virginia Avenue, and West Fork Road intersection are caused because of intersection-related congestion and traffic queues. Crash rates currently over exceed the statewide average by a mean of 35 times higher than normal. By improving the existing LOS and relieving congestion, traffic crashes at the Colerain intersection will be reduced. This can be accomplished by providing more green time for Colerain Avenue traffic and adding turn lanes to reduce queuing, which will relieve congestion and have a favorable impact on reducing crashes.

INTERCITY AND REGIONAL MOBILITY

A functional roadway network is an important component to the Northside neighborhood and surrounding communities, which connects people to their homes, employment and shopping needs. The location of the intersection improvement also occurs at a point in the topography and local road network that creates a natural gateway between several northern Cincinnati communities and access to the interstate and region. The current roadway situation with the abandoned Colerain Modified Expressway was never intended to become permanent, and improvements should be implemented to correct these problems. Intersection realignment and the addition of turn lanes at the intersection would also assist in accommodating both local trips on Colerain Avenue and regional trips that intend to access the interstate system via the Colerain Avenue ramps.

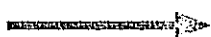
HAM-27-6.49
Exhibit 11
2004 Annual Average Daily Traffic



Legend

13,903

AADT



Direction of Traffic

ME
COMPANIES

HAM-27-6.49

Exhibit 12

2004/2030 AM and PM Peak Hour Turning Movements

AM Peak Hour Turning Movements for 2004 and 2030 No-Build Traffic													
Hour Begin	SBR	SBT	SBL	WBR	WBT	WBL	NBR	NBT	NBL	EBR	EBT	EBL	Total
7:00 AM (2003)	24	1453	0	19	95	506	87	378	46	322	206	51	3187
Seas. Adj.	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93	0.92	0.92	0.92	
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	
2004 ADJ VOL	23	1378	0	18	89	475	83	359	44	302	193	48	3011
2030 Adj Factor	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	
2030 GRTH VOL	39	2357	0	30	152	812	141	613	75	517	331	82	5149

PM Peak Hour Turning Movements for 2004 and 2030 No-Build Traffic													
Hour Begin	SBR	SBT	SBL	WBR	WBT	WBL	NBR	NBT	NPL	EBR	EBT	EBL	Total
5:00 PM (2003)	57	655	0	66	168	280	189	1192	192	72	136	72	3079
Seas. Adj.	0.93	0.93	0.93	0.92	0.92	0.92	0.93	0.93	0.93	0.92	0.92	0.92	
Growth Factor	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	1.02	
2004 ADJ VOL	58	621	0	62	158	263	179	1131	182	68	128	68	2913
2030 Adj Factor	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	
2030 GRTH VOL	92	1062	0	106	270	449	307	1934	311	116	218	116	4981

HAM-27-6.49

Exhibit 13

Traffic Crash Data

Description	Avg Rate	Link Rate*	Link Rate Factor	Link Total	Crash Type												Location	
					11	84	3	19	73	20	2	17	10	15	2	24	Intersect.	Non Inter.
Colerain Ave Interchange Area	0.85	29.91	35.19	280	11	84	3	19	73	20	2	17	10	15	2	24	27	253
Colerain - Florida to ramp from I-74	0.72	12.52	17.39	15	1	2	0	0	3	4	0	1	0	3	0	1	4	11
Colerain - Ramp from IR74 WB to IR74 EB ramp	0.72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colerain - Ramp from IR74 EB to Virginia/West Fork	0.72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colerain - Virginia/West Fork to Ammon	0.72	26.33	36.57	40	2	13	1	2	13	0	0	0	4	4	0	1	1	39
Colerain - Ammon to Lambston	0.72	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colerain and WB IR74 exit ramp	0.48	2.03	4.23	31	1	8	1	2	12	2	0	3	0	0	1	1	4	27
Colerain and EB IR74 entrance ramp	0.11	0.92	8.36	14	1	3	1	1	6	1	0	0	0	0	0	1	0	14
Colerain and Virginia/West Fork	0.48	10.78	22.35	11	0	3	0	0	32	9	2	7	3	3	1	14	15	96
Colerain and Ammon	0.11	5.53	50.27	56	5	17	0	11	8	2	0	1	3	5	0	4	1	55
Colerain and Lambston	0.11	3.06	27.82	31	0	16	0	3	6	2	0	2	0	1	0	1	2	29
West Fork - Hays Av to Colerain	1.45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Fork and Hays	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Fork and Colerain	0.48	10.63	22.15	16	0	3	0	0	32	9	2	7	3	3	1	14	15	96
Virginia - Colerain to Chase	0.68	3.76	5.53	12	1	1	0	2	0	2	0	4	0	0	0	2	1	11
Virginia and Colerain	0.46	10.63	22.15	16	0	3	0	0	32	9	2	7	3	3	1	14	15	96
Virginia and Chase	0.11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

* If > 2.0 then Red

** 21 were Pedestrian or N/S

Areas shaded show Colerain Avenue Intersection

HAM-27-6.49

Exhibit 13

Traffic Crash Data

Description	Contour		Light Condition			Pavement Condition			At Fault Vehicle Direction**				Severity			Econ. Loss	ADT Year		
	233	45	213	54	11	2	176	98	3	3	148	NB	SB	EB	WB			Inj	Fat
Colerain Ave Interchange Area																			
Colerain - Florida to ramp from I-74	14	1	9	5	1	0	10	4	0	1	9	4	1	1	5	10	1974	5856500	10740
Colerain - Ramp from IR74 WB to IR74 EB ramp	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9950
Colerain - Ramp from IR74 EB to Virginia/West Fork	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17400
Colerain - Virginia/West Fork to Ammon	32	8	32	7	1	0	23	17	0	0	27	10	0	1	9	31	769500	9250	2003
Colerain - Ammon to Lambston	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9250
Colerain and WB IR74 exit ramp	23	7	19	6	5	1	24	5	1	1	14	10	1	3	10	21	794500	13916	2003
Colerain and EB IR74 entrance ramp	10	4	10	4	0	0	8	5	1	0	12	1	0	0	4	10	325000	13916	2003
Colerain and Virginia/West Fork	39	17	49	6	0	1	22	34	0	0	37	11	2	1	18	38	1431000	9450	2003
Colerain and Ammon	26	5	23	6	1	1	18	13	0	0	16	12	2	1	12	19	925500	9250	2003
Colerain and Lambston	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9250
West Fork and Colerain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7800
West Fork - Hays Av to Colerain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7800
West Fork and Hays	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7800
West Fork and Colerain	104	56	184	24	3	0	79	100	0	0	46	27	18	9	22	89	1940500	9540	2003
Virginia - Colerain to Chase	10	2	10	2	0	0	9	3	0	0	2	2	4	2	5	7	381500	10800	2003
Virginia - Colerain to Chase	104	61	184	24	3	0	79	100	0	0	46	27	18	9	22	89	1940500	9540	2003
Virginia and Colerain	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10800
Virginia and Chase	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2003

* If > 2.0 then Red

** 21 were Pedestrian or N/S.

Areas shaded show Colerain-Avenue intersection

SUBMISSION CHECKLIST FOR STATE OF OHIO CAPITAL IMPROVEMENT GRANT/LOAN APPLICATIONS

This checklist must be submitted with the other items necessary for project eligibility and review. Upon district receipt of the full package, this checklist will be date stamped and a copy will be forwarded to the applying jurisdiction. Once the checklist has been stamped, the district will accept no additional information regarding the project.

HAM-US 27-6.29 (Colerain/West Fork/Virginia Inter. Improv.)

The following items **MUST** be submitted (by the deadline for such submission) in order for the District Two-Integrating Committee and Support Staff to consider your application complete and eligible for funding:

 X OPWC Application for X Additional Support X Detailed Cost Estimate
Financial Assistance (State of Information Form (District (Signed & Sealed by P.E.)
Ohio Form-Signed by C.E.O. of Two Form)
jurisdiction)

 X Useful Life Certificate X Status of Funds X Project Vicinity Map
(Signed & Sealed by P.E.) Certification (Jurisdiction (Must be legible with project
Letterhead – Signed by C.F.O. of highlighted)
jurisdiction)

 X Project Pictures (Minimum of 4 X Users Certification (Signed NA Loan Repayment Method
- Mounted) by P.E. or C.E.O. of jurisdiction) (Jurisdiction Letterhead – Signed
by C.F.O. of jurisdiction) *For loan
projects only.*

The following items **MUST** be submitted with the application in order for the District Two Support Staff to consider the maximum points available for our application. (Specify type of submission.)

- | | |
|--|--|
| <ul style="list-style-type: none"> • Infrastructure Condition Data
Cincinnati Customer Service Response database information.
Photos showing failing pavement. | <ul style="list-style-type: none"> • Infrastructure Safety Data
ODOT Project Purpose and Need statement
Capacity (Synchro) reports |
| <ul style="list-style-type: none"> • Infrastructure Health Data | <ul style="list-style-type: none"> • Jurisdiction User Fee/Assessment Data |
| <ul style="list-style-type: none"> • Economic Growth Data | <ul style="list-style-type: none"> • Alleviate Traffic Hazards/LOS Data
Capacity (Synchro) reports
Preliminary plans |
| <ul style="list-style-type: none"> • Ban/Moratorium Data | <ul style="list-style-type: none"> • Users Certification Data |

The following items **must** be submitted by NOVEMBER 5, 2007:

<u> </u> Capital Improvement Report (State of Ohio Form)	<u> </u> Enabling Legislation (On Jurisdiction Letterhead and Signed by Clerk)
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